Occupational Employment and Wages in Phoenix-Mesa-Scottsdale — May 2017

Workers in the Phoenix-Mesa-Scottsdale Metropolitan Statistical Area had an average (mean) hourly wage of $23.80 in May 2017, about 2 percent below the nationwide average of $24.34, according to the U.S. Bureau of Labor Statistics. Assistant Commissioner for Regional Operations Richard Holden noted that, after testing for statistical significance, wages in the local area were lower than their respective national averages in 13 of the 22 major occupational groups, including management; life, physical, and social science; and education, training, and library. The food preparation and serving related group had a significantly higher wage than the national average.

When compared to the nationwide distribution, local employment was more highly concentrated in 6 of the 22 occupational groups, including office and administrative support; management; and sales and related. Conversely, eight groups had employment shares significantly below their national representation, including production; education, training, and library; and transportation and material moving. (See table A and box note at end of release.)

Table A. Occupational employment and wages by major occupational group, United States and the Phoenix-Mesa-Scottsdale Metropolitan Statistical Area, and measures of statistical significance, May 2017

<table>
<thead>
<tr>
<th>Major occupational group</th>
<th>Percent of total employment United States</th>
<th>Phoenix</th>
<th>Mean hourly wage United States</th>
<th>Phoenix</th>
<th>Percent difference (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, all occupations</td>
<td>100.0</td>
<td>100.0</td>
<td>$24.34</td>
<td>$23.80*</td>
<td>-2</td>
</tr>
<tr>
<td>Management</td>
<td>5.1</td>
<td>6.4*</td>
<td>57.65</td>
<td>50.32*</td>
<td>-13</td>
</tr>
<tr>
<td>Business and financial operations</td>
<td>5.2</td>
<td>5.7*</td>
<td>36.70</td>
<td>33.20*</td>
<td>-10</td>
</tr>
<tr>
<td>Computer and mathematical</td>
<td>3.0</td>
<td>3.8*</td>
<td>43.18</td>
<td>40.34*</td>
<td>-7</td>
</tr>
<tr>
<td>Architecture and engineering</td>
<td>1.8</td>
<td>1.8</td>
<td>41.44</td>
<td>39.14*</td>
<td>-6</td>
</tr>
<tr>
<td>Life, physical, and social science</td>
<td>0.8</td>
<td>0.6*</td>
<td>35.76</td>
<td>31.32*</td>
<td>-12</td>
</tr>
<tr>
<td>Community and social service</td>
<td>1.5</td>
<td>1.5</td>
<td>23.10</td>
<td>22.10*</td>
<td>-4</td>
</tr>
<tr>
<td>Legal</td>
<td>0.8</td>
<td>0.7</td>
<td>51.62</td>
<td>49.87</td>
<td>-3</td>
</tr>
<tr>
<td>Education, training, and library</td>
<td>6.1</td>
<td>4.7*</td>
<td>26.67</td>
<td>22.60*</td>
<td>-15</td>
</tr>
<tr>
<td>Arts, design, entertainment, sports, and media</td>
<td>1.4</td>
<td>1.2*</td>
<td>28.34</td>
<td>25.73*</td>
<td>-9</td>
</tr>
<tr>
<td>Healthcare practitioners and technical</td>
<td>6.0</td>
<td>5.8</td>
<td>38.83</td>
<td>40.23</td>
<td>4</td>
</tr>
<tr>
<td>Healthcare support</td>
<td>2.9</td>
<td>2.5*</td>
<td>15.05</td>
<td>15.46</td>
<td>3</td>
</tr>
<tr>
<td>Protective service</td>
<td>2.4</td>
<td>2.6*</td>
<td>22.69</td>
<td>21.89</td>
<td>-4</td>
</tr>
<tr>
<td>Food preparation and serving related</td>
<td>9.3</td>
<td>9.2</td>
<td>11.88</td>
<td>12.32*</td>
<td>4</td>
</tr>
<tr>
<td>Building and grounds cleaning and maintenance</td>
<td>3.1</td>
<td>3.0*</td>
<td>13.91</td>
<td>13.22*</td>
<td>-5</td>
</tr>
<tr>
<td>Personal care and service</td>
<td>3.6</td>
<td>3.5</td>
<td>13.11</td>
<td>13.10</td>
<td>0</td>
</tr>
<tr>
<td>Sales and related</td>
<td>10.2</td>
<td>11.1*</td>
<td>19.56</td>
<td>18.64*</td>
<td>-5</td>
</tr>
<tr>
<td>Office and administrative support</td>
<td>15.4</td>
<td>17.4*</td>
<td>18.24</td>
<td>18.23</td>
<td>0</td>
</tr>
<tr>
<td>Farming, fishing, and forestry</td>
<td>0.3</td>
<td>0.2*</td>
<td>13.87</td>
<td>13.25</td>
<td>-4</td>
</tr>
</tbody>
</table>

Note: See footnotes at end of table.
Footnotes:
(1) A positive percent difference measures how much the mean wage in the Phoenix-Mesa-Scottsdale Metropolitan Statistical Area is above the national mean wage, while a negative difference reflects a lower wage.
* The percent share of employment or mean hourly wage for this area is significantly different from the national average of all areas at the 90-percent confidence level.

One occupational group—office and administrative support—was chosen to illustrate the diversity of data available for any of the 22 major occupational categories. Phoenix-Mesa-Scottsdale had 343,990 jobs in office and administrative support, accounting for 17.4 percent of local area employment, significantly higher than the 15.4-percent share nationally. The average hourly wage for this occupational group locally was $18.23, compared to the national wage of $18.24.

Some of the larger detailed occupations within the office and administrative support group included customer service representatives (73,250), general office clerks (33,890), and secretaries and administrative assistants, except legal, medical, and executive (30,630). Among the higher paying jobs were first-line supervisors of office and administrative support workers, and executive secretaries and executive administrative assistants, with mean hourly wages of $26.39 and $26.38, respectively. At the lower end of the wage scale were hotel, motel, and resort desk clerks ($11.99) and clerical library assistants ($13.33). (Detailed occupational data for office and administrative support are presented in table 1; for a complete listing of detailed occupations available go to www.bls.gov/oes/current/oes_38060.htm.)

Location quotients allow us to explore the occupational make-up of a metropolitan area by comparing the composition of jobs in an area relative to the national average. (See table 1.) For example, a location quotient of 2.0 indicates that an occupation accounts for twice the share of employment in the area than it does nationally. In the Phoenix-Mesa-Scottsdale Metropolitan Statistical Area, above-average concentrations of employment were found in some of the occupations within the office and administrative support group. For instance, loan interviewers and clerks were employed at 2.4 times the national rate in Phoenix, and reservation and transportation ticket agents and travel clerks, at 2.1 times the U.S. average. On the other hand, stock clerks and order fillers had a location quotient of 1.0 in Phoenix, indicating that this particular occupation’s local and national employment shares were similar.
These statistics are from the Occupational Employment Statistics (OES) survey, a federal-state cooperative program between BLS and State Workforce Agencies, in this case, the Arizona Department of Administration.

Notes on Occupational Employment Statistics Data

With the release of the May 2017 estimates, the OES program has replaced 21 detailed occupations found in the 2010 Standard Occupational Classification (SOC) with 10 new aggregations of those occupations. In addition, selected 4- and 5-digit North American Industry Classification System (NAICS) industries previously published by OES will no longer be published separately. Some of the 4-digit NAICS industries that are no longer being published separately will instead be published as OES-specific industry aggregations. More information about the new occupational and industry aggregations is available at [www.bls.gov/oes/changes_2017.htm](http://www.bls.gov/oes/changes_2017.htm).

A value that is statistically different from another does not necessarily mean that the difference has economic or practical significance. Statistical significance is concerned with the ability to make confident statements about a universe based on a sample. It is entirely possible that a large difference between two values is not significantly different statistically, while a small difference is, since both the size and heterogeneity of the sample affect the relative error of the data being tested.

Technical Note

The Occupational Employment Statistics (OES) survey is a semiannual survey measuring occupational employment and wage rates for wage and salary workers in nonfarm establishments in the United States. The OES data available from BLS include cross-industry occupational employment and wage estimates for the nation; over 650 areas, including states and the District of Columbia, metropolitan statistical areas (MSAs), metropolitan divisions, nonmetropolitan areas, and territories; national industry-specific estimates at the NAICS sector, 3-, 4-, and selected 5- and 6-digit industry levels, and national estimates by ownership across all industries and for schools and hospitals. OES data are available at [www.bls.gov/oes/tables.htm](http://www.bls.gov/oes/tables.htm).

OES estimates are constructed from a sample of about 1.2 million establishments. Each year, two semiannual panels of approximately 200,000 sampled establishments are contacted, one panel in May and the other in November. Responses are obtained by mail, Internet or other electronic means, email, telephone, or personal visit. The May 2017 estimates are based on responses from six semiannual panels collected over a 3-year period: May 2017, November 2016, May 2016, November 2015, May 2015, and November 2014. The overall national response rate for the six panels, based on the 50 states and the District of Columbia, is 72 percent based on establishments and 68 percent based on weighted sampled employment. The unweighted sample employment of 82 million across all six semiannual panels represents approximately 58 percent of total national employment. The sample in the Phoenix-Mesa-Scottsdale Metropolitan Statistical Area included 7,499 establishments with a response rate of 60 percent. For more information about OES concepts and methodology, go to [www.bls.gov/oes/current/oes_tec.htm](http://www.bls.gov/oes/current/oes_tec.htm).

Metropolitan area definitions

The substate area data published in this release reflect the standards and definitions established by the U.S. Office of Management and Budget.


Additional information

OES data are available on our regional web page at www.bls.gov/regions/west. Answers to frequently asked questions about the OES data are available at www.bls.gov/oes/oes_ques.htm. Detailed technical information about the OES survey is available in our Survey Methods and Reliability Statement on the BLS website at www.bls.gov/oes/current/methods_statement.pdf.

Information in this release will be made available to sensory impaired individuals upon request. Voice phone: (202) 691-5200; Federal Relay Service: (800) 877-8339.
<table>
<thead>
<tr>
<th>Occupation (1)</th>
<th>Employment</th>
<th>Mean wages</th>
<th>Location quotient (3)</th>
<th>Hourly</th>
<th>Annual (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office and administrative support occupations</td>
<td>343,990</td>
<td>$18.23</td>
<td>1.1</td>
<td>$37,920</td>
<td></td>
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<tr>
<td>First-line supervisors of office and administrative support workers</td>
<td>27,570</td>
<td>1.4</td>
<td>26.39</td>
<td>54,890</td>
<td></td>
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<tr>
<td>Switchboard operators, including answering service</td>
<td>800</td>
<td>0.7</td>
<td>13.71</td>
<td>28,510</td>
<td></td>
</tr>
<tr>
<td>Bill and account collectors</td>
<td>7,410</td>
<td>2.0</td>
<td>16.93</td>
<td>35,210</td>
<td></td>
</tr>
<tr>
<td>Billing and posting clerks</td>
<td>8,810</td>
<td>1.3</td>
<td>18.18</td>
<td>37,820</td>
<td></td>
</tr>
<tr>
<td>Bookkeeping, accounting, and auditing clerks</td>
<td>15,890</td>
<td>0.8</td>
<td>19.37</td>
<td>40,290</td>
<td></td>
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<tr>
<td>Gaming cage workers</td>
<td>150</td>
<td>0.7</td>
<td>(5)</td>
<td>(5)</td>
<td></td>
</tr>
<tr>
<td>Payroll and timekeeping clerks</td>
<td>1,910</td>
<td>0.9</td>
<td>20.70</td>
<td>43,060</td>
<td></td>
</tr>
<tr>
<td>Procurement clerks</td>
<td>1,750</td>
<td>1.8</td>
<td>20.58</td>
<td>42,810</td>
<td></td>
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<tr>
<td>Tellers</td>
<td>4,460</td>
<td>0.7</td>
<td>13.75</td>
<td>28,600</td>
<td></td>
</tr>
<tr>
<td>Financial clerks, all other</td>
<td>800</td>
<td>1.8</td>
<td>19.80</td>
<td>41,190</td>
<td></td>
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<tr>
<td>Brokerage clerks</td>
<td>1,470</td>
<td>1.8</td>
<td>22.97</td>
<td>47,780</td>
<td></td>
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<tr>
<td>Correspondence clerks</td>
<td>90</td>
<td>1.0</td>
<td>19.90</td>
<td>41,390</td>
<td></td>
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<tr>
<td>Court, municipal, and license clerks</td>
<td>2,490</td>
<td>1.3</td>
<td>17.89</td>
<td>37,210</td>
<td></td>
</tr>
<tr>
<td>Credit authors, checkers, and clerks</td>
<td>1,020</td>
<td>2.1</td>
<td>19.07</td>
<td>39,670</td>
<td></td>
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<tr>
<td>Customer service representatives</td>
<td>73,250</td>
<td>1.9</td>
<td>16.69</td>
<td>34,710</td>
<td></td>
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<tr>
<td>Eligibility interviewers, government programs</td>
<td>920</td>
<td>0.5</td>
<td>19.66</td>
<td>40,900</td>
<td></td>
</tr>
<tr>
<td>File clerks</td>
<td>1,780</td>
<td>1.1</td>
<td>15.66</td>
<td>32,580</td>
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</tr>
<tr>
<td>Hotel, motel, and resort desk clerks</td>
<td>2,600</td>
<td>0.7</td>
<td>11.99</td>
<td>24,940</td>
<td></td>
</tr>
<tr>
<td>Interviewers, except eligibility and loan</td>
<td>950</td>
<td>0.4</td>
<td>17.25</td>
<td>35,880</td>
<td></td>
</tr>
<tr>
<td>Library assistants, clerical</td>
<td>760</td>
<td>0.6</td>
<td>13.33</td>
<td>27,720</td>
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<tr>
<td>Loan interviewers and clerks</td>
<td>7,680</td>
<td>2.4</td>
<td>19.81</td>
<td>41,200</td>
<td></td>
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<tr>
<td>New accounts clerks</td>
<td>460</td>
<td>0.8</td>
<td>19.76</td>
<td>41,090</td>
<td></td>
</tr>
<tr>
<td>Order clerks</td>
<td>2,410</td>
<td>1.0</td>
<td>15.56</td>
<td>32,370</td>
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<tr>
<td>Human resources assistants, except payroll and timekeeping</td>
<td>1,960</td>
<td>1.1</td>
<td>19.28</td>
<td>40,110</td>
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<tr>
<td>Receptionists and information clerks</td>
<td>13,700</td>
<td>1.0</td>
<td>14.34</td>
<td>29,820</td>
<td></td>
</tr>
<tr>
<td>Reservation and transportation ticket agents and travel clerks</td>
<td>4,210</td>
<td>2.1</td>
<td>20.93</td>
<td>43,540</td>
<td></td>
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<tr>
<td>Information and record clerks, all other</td>
<td>4,130</td>
<td>1.8</td>
<td>16.76</td>
<td>34,860</td>
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<tr>
<td>Cargo and freight agents</td>
<td>770</td>
<td>0.6</td>
<td>21.55</td>
<td>44,820</td>
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</tr>
<tr>
<td>Couriers and messengers</td>
<td>870</td>
<td>0.8</td>
<td>14.65</td>
<td>30,460</td>
<td></td>
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<tr>
<td>Police, fire, and ambulance dispatchers</td>
<td>1,030</td>
<td>0.8</td>
<td>23.27</td>
<td>48,410</td>
<td></td>
</tr>
<tr>
<td>Dispatchers, except police, fire, and ambulance</td>
<td>2,950</td>
<td>1.1</td>
<td>19.71</td>
<td>40,990</td>
<td></td>
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<tr>
<td>Meter readers, utilities</td>
<td>410</td>
<td>0.9</td>
<td>22.89</td>
<td>47,610</td>
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<tr>
<td>Postal service clerks</td>
<td>550</td>
<td>0.5</td>
<td>26.16</td>
<td>54,410</td>
<td></td>
</tr>
<tr>
<td>Postal service mail carriers</td>
<td>3,870</td>
<td>0.8</td>
<td>24.33</td>
<td>50,600</td>
<td></td>
</tr>
<tr>
<td>Postal service mail sorters, processors, and processing machine operators</td>
<td>1,400</td>
<td>0.9</td>
<td>23.85</td>
<td>49,600</td>
<td></td>
</tr>
<tr>
<td>Production, planning, and expediting clerks</td>
<td>5,780</td>
<td>1.2</td>
<td>22.71</td>
<td>47,250</td>
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</tr>
<tr>
<td>Shipping, receiving, and traffic clerks</td>
<td>7,780</td>
<td>0.8</td>
<td>16.04</td>
<td>33,360</td>
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<tr>
<td>Stock clerks and order fillers</td>
<td>28,050</td>
<td>1.0</td>
<td>13.51</td>
<td>28,110</td>
<td></td>
</tr>
<tr>
<td>Weighers, measurers, checkers, and samplers, recordkeeping</td>
<td>950</td>
<td>0.9</td>
<td>14.37</td>
<td>29,900</td>
<td></td>
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<tr>
<td>Executive secretaries and executive administrative assistants</td>
<td>8,230</td>
<td>1.0</td>
<td>26.38</td>
<td>54,870</td>
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<tr>
<td>Legal secretaries</td>
<td>2,130</td>
<td>0.8</td>
<td>23.92</td>
<td>49,760</td>
<td></td>
</tr>
<tr>
<td>Medical secretaries</td>
<td>8,980</td>
<td>1.1</td>
<td>17.44</td>
<td>36,270</td>
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</tr>
<tr>
<td>Secretaries and administrative assistants, except legal, medical, and executive</td>
<td>30,630</td>
<td>1.0</td>
<td>17.56</td>
<td>36,520</td>
<td></td>
</tr>
<tr>
<td>Computer operators</td>
<td>(5)</td>
<td>(5)</td>
<td>23.69</td>
<td>49,270</td>
<td></td>
</tr>
<tr>
<td>Data entry keyers</td>
<td>2,750</td>
<td>1.1</td>
<td>15.07</td>
<td>31,340</td>
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<tr>
<td>Word processors and typists</td>
<td>160</td>
<td>0.2</td>
<td>17.98</td>
<td>37,410</td>
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<tr>
<td>Desktop publishers</td>
<td>90</td>
<td>0.6</td>
<td>(5)</td>
<td>(5)</td>
<td></td>
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<tr>
<td>Insurance claims and policy processing clerks</td>
<td>6,010</td>
<td>1.6</td>
<td>19.79</td>
<td>41,160</td>
<td></td>
</tr>
</tbody>
</table>

Note: See footnotes at end of table.
Table 1. Employment and wage data from the Occupational Employment Statistics survey, by occupation, Phoenix-Mesa-Scottsdale Metropolitan Statistical Area, May 2017 - Continued

<table>
<thead>
<tr>
<th>Occupation (1)</th>
<th>Employment</th>
<th>Mean wages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level (2)</td>
<td>Location quotient (3)</td>
</tr>
<tr>
<td>Mail clerks and mail machine operators, except postal service</td>
<td>1,240</td>
<td>1.0</td>
</tr>
<tr>
<td>Office clerks, general</td>
<td>33,890</td>
<td>0.8</td>
</tr>
<tr>
<td>Office machine operators, except computer</td>
<td>1,130</td>
<td>1.5</td>
</tr>
<tr>
<td>Proofreaders and copy markers</td>
<td>190</td>
<td>1.2</td>
</tr>
<tr>
<td>Statistical assistants</td>
<td>180</td>
<td>1.3</td>
</tr>
<tr>
<td>Office and administrative support workers, all other</td>
<td>3,320</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Footnotes:
(1) For a complete listing of all detailed occupations in Phoenix-Mesa-Scottsdale, AZ see www.bls.gov/oes/current/oes_38060.htm
(2) Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.
(3) The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.
(4) Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full-time" hours figure of 2,080 hours; for those occupations where there is not an hourly mean wage published, the annual wage has been directly calculated from the reported survey data.
(5) Estimate not released.